

CA2 ON
EV

E579

FACTS

FOR ENVIRONMENTAL STUDIES

CA2 ON
EV
E579



Ministry
of the
Environment

Ontario

CLEAN-UP DAY



Purpose of Clean-Up Day

The purpose of Clean-Up Day is to improve the appearance of an area and to encourage its citizens not to litter.

We hope that, by having students clean up the litter in their areas, it will create more enthusiasm for the project, and more public awareness of the problem. The clean-up would also serve as a starting point for a unit dealing with the whole problem of solid waste disposal.

Suggested Organization Procedure

1. The clean-up should be scheduled to take place on a given morning with an alternate date specified in the event of bad weather.
2. Each school is responsible for organizing the clean-up in its own area. Schools should encourage as many parents, older brothers and sisters, etc. as possible to participate.
3. Groups should be formed consisting of no more than 10 students with a leader. Each group could be assigned a section of the school's area.
4. Two sizes of garbage bags have been provided. The smaller bags may be more suitable for younger students. When full the bags should all be piled at a designated point.
5. Old clothes and shoes should be worn. An old pair of gloves in each group would be helpful in picking up broken glass. Rakes or even shovels may be helpful in the clean-up of the school yard.
6. The clean-up should be confined to public property, along sidewalks, parks, etc. Do not pick up material from private property unless asked to do so.



Copyright Provisions and Restrictions on Copying:

This Ontario Ministry of the Environment work is protected by Crown copyright (unless otherwise indicated), which is held by the Queen's Printer for Ontario. It may be reproduced for non-commercial purposes if credit is given and Crown copyright is acknowledged.

It may not be reproduced, in all or in part, for any commercial purpose except under a licence from the Queen's Printer for Ontario.

For information on reproducing Government of Ontario works, please contact ServiceOntario Publications at copyright@ontario.ca

7. Warnings to motorists should be broadcast on the radio prior to the clean-up and the police should be alerted, in order to ensure the safety of the students.

Litter Pick-Up and Disposal

Special garbage pick-ups should be arranged in the afternoon. Please designate a spot to pile the garbage bags which can be easily seen and reached by the trucks.

Designing a Unit Based on Clean-Up Day

Although a spring clean-up does temporarily improve the appearance of our neighborhoods, it does not help to solve the real problem, the problem of the ever-increasing amount of solid waste or garbage we produce and must dispose of.

We suggest that, using Clean-Up Day as a starting point, your class could investigate the problem of garbage, where it comes from, what it is, how we dispose of it, how we can reduce the amount produced. In this way, Clean-Up Day may have a more lasting educational value. Some suggestions are offered below.

Pre-Planning

- discussion of procedures for Clean-Up Day
- review of safety rules
- problems created by litter, i.e. unsightliness, expense of collection

Clean-Up Day

Ask students to observe the type of material they collect, what type is most common, i.e. candy wrappers, pop cans, etc.

Compare the type and amount of litter found around the school, in a residential area.

How much litter did your class collect? Is litter a problem in your neighborhood?

Take before and after pictures of the area you cleaned up.

Follow Up Activities

Take a sample bag of litter. Classify it by type of material, source, etc. (Use rubber gloves!) Use the information to make bar graphs.

Observe other pupils during recess, on their way home from school. Record where any littering occurred, what was littered. Or, select a segment of a street and observe for a definite period every day for a week. Who litters? Did Clean-Up Day teach students not to litter?

How would the type of litter found in the following places differ from the type in the school yard, along a highway, near the corner store, shopping plaza, backyard, on a farm?

Select one of the more common types of litter, such as a pop can or candy wrapper. Trace its whole life, the materials that went into it, its manufacture and marketing, how we dispose of it.

Conduct a survey of the type and amount of garbage produced by students in the classroom, at home. What goes into "garbage"? Are there things which could be reused or recycled? What does your garbage say about you?

Make a model cubic yard out of cardboard. On garbage collection day, observe the truck and calculate the number of cubic yards it holds. Ask the driver how many trips he makes per day, how many trucks there are. Using this information, calculate the number of cubic yards of garbage collected in the city per day, week or year. Write to the city public works department to see how accurate your estimate is.

Where does the garbage truck take our garbage? Arrange to visit a sanitary landfill site. Investigate the costs of garbage disposal.

Investigate the various methods used to dispose of garbage, i.e. landfill, incineration, recycling, composting. Compare the costs, effects on the environment.

Create your own landfill site, in order to compare the bio-degradability of various materials. Collect four pieces each of newspaper, waxed paper, brown paper, garbage bag, saran wrap, glass, copper, iron, wood, styrofoam, plastic, tin can, nylon, cotton, wool, etc. Place three of each type of material in a flat of garden soil partly buried in rows. Remove one row each week for three weeks, compare with fourth piece which was not buried.

Alternatively, bury small amounts of various materials. Record what was buried, dig it up next year.

What could an archeologist learn about our way of life by excavating one of our garbage dumps a hundred years from now?

Have pupils attempt to burn some of each type of litter. Keep records as to amount of smoke and ash produced, ability of substance to burn or be burned up.

Make new paper out of old. Tear several sheets of used paper into pieces, put in bowl with warm water and 2 tsp. starch. Using egg beater, make a pulp. Dip window screen into bowl, let water drip out. Turn screen upside down on newspapers. Remove screen carefully, allow to dry, remove from newspapers and iron if necessary. Use the paper for your next art project.

Investigate the feasibility of recycling various materials. Are markets available, are people willing to get involved?

Determine the percentage of packaging in a bag of groceries. Was it all necessary?

Survey class members or stores to see which sells more, milk jugs or pouches, refillable or non-refillable pop bottles.

Conduct a survey to determine the availability of refillable pop bottles, compare cost of refillables and non-refillables.

Use objects you would normally throw out in your next art project.

Watch for newspaper articles for your bulletin board.

Make a list of things we could do to reduce the amount of garbage we produce at school, at home.

Write letters to: the city to obtain information about garbage disposal, to your M.P.P. asking that non-returnable bottles be banned, etc.

Resource Material

Audio-Visual

Garbage (color, 10 minutes) available from Marlin Motion Pictures Limited.
47 Lakeshore Road East, Port Credit.

Join the Waste-Watchers slide presentation, available from the Ontario Ministry of the Environment, 135 St. Clair Ave. West, Toronto, Ontario M4V 1P5. Cost \$5.

Books, Brochures

Fegley, T. Recycling Rodale Press Inc. Emmaus, Pennsylvania, 1973.

Goldstein, J. Garbage as You Like It Rodale Press, 1969.

Ministry of the Environment. Various publications on solid waste management, including Composting - An Educational Fact Sheet on Recycling Solid Waste, A Visit to a Landfill Site, How to Publicize a Recycling Drive and an Introduction to Solid Waste and Recycling.

Schatz, A. and V. Teaching Science with Garbage, Rodale Press, 1971.

Swatek, Paul The User's Guide To The Protection of the Environment, Ballantine Books, New York, 1970.

Wirnam, R.S. The Yellow Pages of learning Resources, M.I.T. Press, 1972.

Recycling: Identifying the Barriers available from the Garbage Coalition, 43 Queens Park Crescent, Toronto. Cost \$1.

Adapted from the Clean-Up Day Manual (May 12, 1976) prepared by the North Bay-Mattawa Conservation Authority, P.O. Box 1215, Shebrooke Street, North Bay, Ontario P1B 8K9